



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,802	12/29/2000	Wolfgang Roesner	AUS920000224US1	5324

7590

05/03/2004

Andrew J. Dillon  
FELSMAN, BRADLEY, VADEN, GUNTER & DILLON, LLP  
Lakewood on the Park, Suite 350  
7600B North Capital of Texas Highway  
Austin, TX 78731

**RECEIVED**

MAY 19 2004

Technology Center 2100

EXAMINER

STEVENS, THOMAS H

ART UNIT

PAPER NUMBER

2123

DATE MAILED: 05/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

TC2100

PK2

Organization

Bldg./Room

U.S. DEPARTMENT OF COMMERCE

COMMISSIONER FOR PATENTS

P.O. BOX 1450

ALEXANDRIA, VA 22313-1450

IF UNDELIVERABLE RETURN IN TEN DAYS

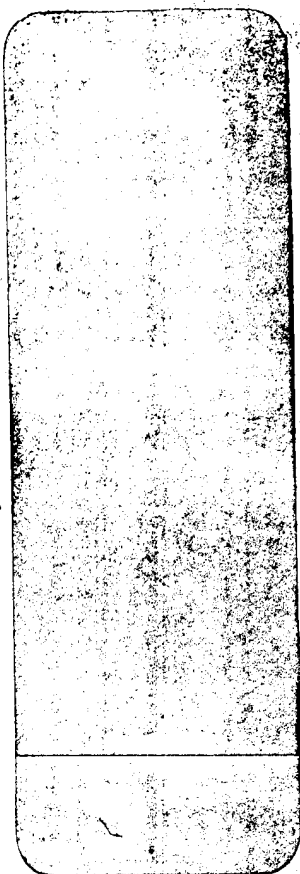
OFFICIAL BUSINESS



AN EQUAL OPPORTUNITY



U.S. OFFICIAL MAIL  
PENALTY  
FOR  
PRIVATE  
USE \$360  
PB meter  
7251870  
U.S. POSTAGE  
5.05



*Handwritten signature*

RECEIVED MAY 0 3 0 4  
U.S. DEPARTMENT OF COMMERCE  
COMMISSIONER FOR PATENTS  
ALEXANDRIA, VA 22313-1450

<b>Office Action Summary</b>	Application No. 09/751,802	Applicant(s) ROESNER ET AL.	
	Examiner Thomas H. Stevens	Art Unit 2123	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12/29/00 & 10/01/01.  
2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-16 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 29 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/10/01/00</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-16 were examined for prosecution.

### *Drawings*

2. Figures 1 and 2 represent data processing systems and thus should be labeled as prior art.

### *Specification*

3. The incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication (pg. 1 of the specification) is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

### *Claim Interpretation*

4. Office personnel are to give claims their "**broadest reasonable interpretation**" in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re*

*Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551(CCPA 1969). See \*also *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322(Fed. Cir. 1989) ("During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow") .... The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed .... An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process. **The examiner equates "field" with "files" since files encompass the creation of fields in the context of software design syntax.**

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it

constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

7. Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Bargh et al. (U.S. Patent 6,223,142 (1998)).

Bargh et al. teaches a method and a system that utilizes compiling instrumentation logic into a simulation model of a digital circuit design (abstract).

Claim 1: A computer-readable medium (figure 1) having stored thereon a data structure comprising: an event name field containing data representing a simulation event (column 16, lines 54-57); and a design entity field containing data representing an entity name of a design entity from which said simulation event is generated (column 8, lines 5-19).

Claim 2: The computer-readable medium of claim 1, wherein said simulation event is a count event, a fail event, or a harvest event (column 12, lines 61-65).

Claim 3: The computer-readable medium of claim 1, wherein said data structure further comprises an instantiation identifier (column 8, lines 57-61) field containing data specifying an instance of said design entity from which said simulation event is generated.

Claim 4: The computer-readable medium of claim 1, wherein said data structure further comprises an instrumentation entity field containing data representing an instrumentation entity (abstract: line 7) that generates said simulation event from within said design entity.

Claim 5: The computer-readable medium of claim 4, wherein said design entity field and said instrumentation entity field produce a unique event namespace for each instrumentation entity associated with said design entity (column 12, lines 31-41).

Claim 6: The computer-readable medium of claim 4, wherein said instrumentation entity field contains the name of an embedded instrumentation entity (column 15, lines 32-40 and 54-57).

Claim 7: The computer-readable medium of claim 4, wherein said instrumentation entity field (abstract: line 7) further contains data specifying an

instance of said instrumentation entity that generates said simulation event from within said design entity (abstract: lines 9-10).

Claim 8: The computer-readable medium of claim 1, wherein said simulation event is defined in an instrumentation entity comment (column 25, lines 41-47), and wherein said data within said event name field includes the name given to said simulation event within said instrumentation entity (column 4, lines 7-24) description comment.

Claim 9: The computer-readable medium of claim 1, wherein said design entity name is unique with respect to entity names of other design entities (column 7, lines 17-31).

Claim 10: A method for processing a simulation event during model simulation, said method comprising (column 18, lines 39-44): associating a design entity identifier with simulation event (abstract); and evaluating occurrences of said simulation event with said simulation model in accordance with said design entity identifier.

Claim 11: The method of claim 10, wherein said design entity identifier includes a design entity name, and wherein said associating step further comprises



encoding said design entity name within a hardware description language declaration of said simulation event (figure 3c).

Claim 12: The method of claim 1, wherein said design entity identifier further includes a design entity instantiation identifier, and wherein said associating step further comprises encoding said design entity instantiation identifier (column 8, 55-65) within said hardware description language declaration (column 15, lines 5-10) of said simulation event.

Claim 13: The method of claim 10, further comprising associating an event name with said simulation event (column 16, lines 54-57).

Claim 14: The method of claim 10, further comprising associating an instrumentation entity with said simulation event, wherein said instrumentation entity instantiated within said design entity (abstract).

Claim 15: The method of claim 14, further comprising generating at least one instance of said design entity (column 28, line 14).

Art Unit: 2123

Claim 16: The method of claim 15, wherein said generating step further comprises generating an instrumentation instance data structure wherein said simulation event is declared (column 22, lines 25-34; and column 3, lines 48-50).


***Correspondence Information***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Stevens whose telephone number is (703) 305-0365, Monday-Friday (8:30 am- 5:30 pm) or contact Supervisor Mr. Kevin Teska at (703) 305-9704. The fax number for the group is 703-872-9306.

Any inquires of general nature or relating to the status of this application should be directed to the Group receptionist whose phone number is (703) 305-3900.

April 2, 2004

THS

  
W. Hanson  
Art. 2123  
Primary Examiner

**Notice of References Cited**

Application/Control No.

09/751,802

Applicant(s)/Patent Under

Re examination  
ROESNER ET AL.

Examiner

Thomas H. Stevens

Art Unit

2123

Page 2 of 2

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-5,103,450	04-1992	Whetsel, Lee D.	714/724
	B	US-5,883,809	03-1999	Sullivan et al.	716/3
	C	US-5,910,897	06-1999	Dangelo et al.	716/19
	D	US-6,182,206	01-2001	Baxter, Michael A.	712/43
	E	US-09729465	12-2000	Derek Edward Williams	717/143
	F	US-09752252	12-2000	Wolfgang Roesner et al.	703/17
	G	US-09752254	12-2000	Wolfgang Roesner et al.	703/17
	H	US-09751803	12-2000	Wolfgang Roesner et al.	703/17
	I	US-09752251	12-2000	Wolfgang Roesner et al.	703/17
	J	US-6,223,142	04-2001	Bargh et al.	703/15
	K	US-6,470,478	10-2002	Bargh et al.	716/4
	L	US-09345163	06-1999	Bargh et al.	703/17
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

**Notice of References Cited**

Application/Control No.

09/751,802

Applicant(s)/Patent Under

Reexamination  
ROESNER ET AL.

Examiner

Thomas H. Stevens

Art Unit

2123

Page 1 of 2

**U.S. PATENT DOCUMENTS**

	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
A	US-6,195,627	02-2001	Bargh et al.	703/14
B	US-5,604,895	02-1997	Raimi, Richard S.	703/13
C	US-5,812,416	09-1998	Gupte et al.	716/2
D	US-6,223,142	04-2001	Bargh et al.	703/15
E	US-5,544,067	08-1996	Rostoker et al.	703/14
F	US-6,212,491	04-2001	Bargh et al.	703/14
G	US-5,841,967	11-1998	Sample et al.	714/33
H	US-5,920,490	07-1999	Peters, Michael J.	716/2
I	US-6,052,524	04-2000	Pauna, Mark R.	703/22
J	US-6,202,042	03-2001	Bargh et al.	703/16
K	US-5,943,490	08-1999	Sample, Stephen P.	703/28
L	US-6,195,629	02-2001	Bargh et al.	703/17
M	US-5,680,332	10-1997	Raimi et al.	703/13

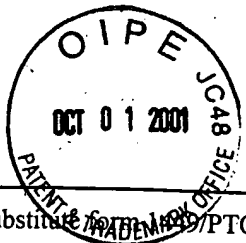
**FOREIGN PATENT DOCUMENTS**

	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
N					
O					
P					
Q					
R					
S					
T					

**NON-PATENT DOCUMENTS**

	Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
U	
V	
W	
X	

copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
tes in MM-YYYY format are publication dates. Classifications may be US or foreign.



Substitute for PTO

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

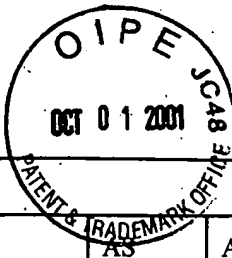
Complete if Known

Application Number	09/751,802
Filing Date	December 29, 2000
First Named Inventor	WOLFGANG ROESNER, ET AL.
Group Art Unit	2123
Examiner Name	UNKNOWN

Sheet	1	of	2	Attorney Docket Number	AUS920000224US1
-------	---	----	---	------------------------	-----------------

U.S. PATENT DOCUMENTS

Examiner Initials	IDS Doc #	U.S. Patent Document Number	Name of Patentee or Applicant	Publication Date MM-DD-YYYY
THS	AA	Attorney Docket No. AT9-98-726; App. No. 09/345,163	Related Co-Pending Application John F. Bargh, et al.	Application Filed on: June 29, 1999
THS	AB	6,196,627	Bargh, et al.	02/27/2001
THS	AC	5,605,895	Raimi	02/18/1997
THS	AD	5,812,416	Gupte, et al.	09/22/1998
THS	AE	6,223,142	Bargh, et al.	04/24/2001
THS	AF	5,544,067	Rostoker, et al.	08/06/1996
THS	AG	6,212,491	Bargh, et al.	04/03/2001
THS	AH	5,841,967	Sample, et al.	11/24/1998
THS	AI	5,920,490	Peters	07/06/1999
THS	AJ	6,052,524	Pauna	04/18/2000
THS	AK	6,202,042	Bargh, et al.	03/13/2001
THS	AL	5,943,490	Sample	08/24/1999
THS	AM	6,195,629	Bargh, et al.	02/27/2001
THS	AN	5,680,332	Raimi, et al.	10/21/1997
THS	AO	5,103,450	Whetsel	04/07/1992
THS	AP	5,883,809	Sullivan, et al.	03/16/1999
THS	AQ	5,910,897	Dangelo, et al.	06/08/1999
THS	AR	6,182,206	Baxter	01/30/2001



U.S. PATENT DOCUMENTS						
THS	AS	Attorney Docket No. AUS920000222US1 App. No. 09/729,465	Related Co-Pending Application Derek Edward Williams		12/05/2000	
THS	AT	Attorney Docket No. AUS920000225US1 App. No. 09/752,252	Related Co-Pending Application Wolfgang Roesner, et al.		12/30/2000	
THS	AU	Attorney Docket No. AUS920000228US1 App. No. 09/752,254	Related Co-Pending Application Wolfgang Roesner, et al.		12/30/2000	
THS	AV	Attorney Docket No. AUS920000227US1 App. No. 09/751,803	Related Co-Pending Application Wolfgang Roesner, et al.		12/29/2000	
THS	AW	Attorney Docket No. AUS920000226US1 App. No. 09/752,251	Related Co-Pending Application Wolfgang Roesner, et al.		12/30/2000	
FOREIGN PATENT DOCUMENTS						
Examiner Initials	IDS Doc #	Office	Foreign Patent Document No.	Name of Patentee or Applicant	Date of Publication	English Translation
OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS						
Examiner Initials	IDS Doc #	Include the name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published				English Translation
Examiner Signature	Tom Hwa			Date Considered	4/2/04	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.